

## Complete Summary

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### GUIDELINE TITLE

External cephalic version.

### BIBLIOGRAPHIC SOURCE(S)

American College of Obstetricians and Gynecologists (ACOG). External cephalic version. Washington (DC): American College of Obstetricians and Gynecologists (ACOG); 2000 Feb. 7 p. (ACOG practice bulletin; no. 13). [41 references]

### GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: External cephalic version. Washington (DC): American College of Obstetricians and Gynecologists (ACOG); 1997 Jul. 8 p. (ACOG practice patterns; no. 4).

According to the guideline developer, this guideline is still considered to be current as of December 2005, based on a review of literature published that is performed every 18-24 months following the original guideline publication.

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## SCOPE

### DISEASE/CONDITION(S)

Term breech pregnancy

### GUIDELINE CATEGORY

Management

## CLINICAL SPECIALTY

Obstetrics and Gynecology

## INTENDED USERS

Physicians

## GUIDELINE OBJECTIVE(S)

- To aid practitioners in making decisions about appropriate obstetric and gynecologic care
- To provide information about external cephalic version (ECV) by summarizing the relevant evidence presented in published studies and to make recommendations regarding its use in obstetric practice

## TARGET POPULATION

Pregnant women at term ( $\geq 36$  weeks) with breech presentations

## INTERVENTIONS AND PRACTICES CONSIDERED

External cephalic version (ECV)

Note: ECV in conjunction with tocolysis was considered but not recommended for routine ECV attempts.

## MAJOR OUTCOMES CONSIDERED

- Rate of successful version
- Rate of uncomplicated vaginal deliveries following successful version
- Rate of cesarean deliveries after attempted version
- Maternal and perinatal morbidity and mortality

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)  
Hand-searches of Published Literature (Secondary Sources)  
Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The MEDLINE database, the Cochrane Library, and the American College of Obstetricians and Gynecologists' (ACOG's) own internal resources were used to conduct a literature search to locate relevant articles published between January 1981 and May 1999. Priority was given to articles reporting results of original

research, although review articles and commentaries also were consulted. Abstracts of research presented at symposia and scientific conferences were not considered adequate for inclusion in this document.

Guidelines published by organizations or institutions such as the National Institutes of Health and the American College of Obstetricians and Gynecologists were reviewed, and additional studies were located by reviewing bibliographies of identified articles.

#### NUMBER OF SOURCE DOCUMENTS

Not stated

#### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Studies were reviewed and evaluated for quality according to the method outlined by the U.S. Preventive Services Task Force.

I Evidence obtained from at least one properly designed randomized controlled trial

II-1 Evidence obtained from well-designed controlled trials without randomization

II-2 Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group

II-3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments also could be regarded as this type of evidence.

III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

#### METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses  
Systematic Review with Evidence Tables

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

## DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Analysis of available evidence was given priority in formulating recommendations. When reliable research was not available, expert opinions from obstetrician-gynecologists were used. See also the "Rating Scheme for the Strength of Recommendations" field regarding Grade C recommendations.

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Based on the highest level of evidence found in the data, recommendations are provided and graded according to the following categories:

Level A - Recommendations are based on good and consistent scientific evidence.

Level B - Recommendations are based on limited or inconsistent scientific evidence.

Level C - Recommendations are based primarily on consensus and expert opinion.

## COST ANALYSIS

A recent decision analysis measuring cost implications associated with four potential methods of managing term pregnancies with breech presentations predicted that use of external cephalic version (ECV) would result in fewer cesarean deliveries and lower costs than either scheduled cesarean delivery or trial of labor without an ECV attempt. Even if failed ECV attempts were followed by routine cesarean delivery, the overall cesarean delivery rate would be lower than that of a trial of labor without an ECV attempt. Sensitivity analysis revealed that as long as less than 52% of all breech presentations are eligible for a trial of labor, a policy of attempting ECV followed by either a trial of labor or routine cesarean delivery (for failed attempts) would be less expensive than a policy of routine cesarean delivery or trial of labor without ECV. It should be noted that the decision analysis included x-ray pelvimetry to assess eligibility for a trial of labor, a practice that may not be widely accepted.

## METHOD OF GUIDELINE VALIDATION

Internal Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Practice Bulletins are validated by two internal clinical review panels composed of practicing obstetrician-gynecologists generalists and sub-specialists. The final guidelines are also reviewed and approved by the American College of Obstetricians and Gynecologists (ACOG) Executive Board.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

The grades of evidence (I-III) and levels of recommendations (A-C) are defined at the end of "Major Recommendations."

The following recommendation is based on good and consistent scientific evidence (Level A):

- Because the risk of an adverse event occurring as a result of external cephalic version (ECV) is small and the cesarean delivery rate is significantly lower among women who have undergone successful version, all women near term with breech presentations should be offered a version attempt.

The following recommendations are based on limited or inconsistent scientific evidence (Level B):

- Patients should have completed 36 weeks of gestation before attempting ECV.
- Previous cesarean delivery is not associated with a lower rate of success; however, the magnitude of the risk of uterine rupture is not known.
- There is insufficient evidence to recommend routine tocolysis for ECV attempts for all patients, but it may particularly benefit nulliparous patients.
- Evidence is inconsistent regarding the benefits of anesthesia use during ECV attempts.
- Cost-effectiveness depends upon utilization of vaginal breech deliveries and costs of the version protocol at a particular institution, but at least one decision analysis suggests the policy is cost effective.

The following recommendations are based primarily on consensus and expert opinion (Level C):

- Fetal assessment before and after the procedure is recommended.
- External cephalic version should be attempted only in settings in which cesarean delivery services are readily available.

### Definitions:

#### Grades of Evidence

I Evidence obtained from at least one properly designed randomized controlled trial

II-1 Evidence obtained from well-designed controlled trials without randomization

II-2 Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group

II -3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments also could be regarded as this type of evidence.

III Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

#### Levels of Recommendations

Level A - Recommendations are based on good and consistent scientific evidence.

Level B - Recommendations are based on limited or inconsistent scientific evidence.

Level C - Recommendations are based primarily on consensus and expert opinion.

#### CLINICAL ALGORITHM(S)

An algorithm is provided in the original guideline document for "Patient Management for External Cephalic Version."

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

The immediate benefit of successful version is an increased probability that the fetus will be in a vertex presentation for delivery.

#### POTENTIAL HARMS

- Fetal heart rate changes during attempted versions are not uncommon but usually stabilize when the procedure is discontinued.
- Serious adverse effects associated with external cephalic version (ECV) do not occur often, but there have been a few reported cases of placental abruption and preterm labor.
- Although the incidence of serious complications associated with ECV is low, the potential is present, making it prudent to perform ECV in a facility that has ready access to cesarean delivery services.

## CONTRAINDICATIONS

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Contraindications to external cephalic version (ECV) are based on a common-sense approach designed to minimize the risks of an adverse outcome and to maximize the chances for success. Clearly any indication for a cesarean delivery in a patient, such as placenta previa, would be a contraindication to ECV, but there is insufficient evidence to construct a comprehensive list.

## QUALIFYING STATEMENTS

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- These guidelines should not be construed as dictating an exclusive course of treatment or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to the institution or type of practice.
- There is scant information concerning external cephalic version (ECV) attempts among women who have a preexisting uterine scar or who undergo the procedure during the early stages of labor.
- Currently, there is not enough consistent evidence to make a recommendation favoring spinal or epidural anesthesia during ECV attempts.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

### IMPLEMENTATION TOOLS

Clinical Algorithm

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better  
Staying Healthy

### IOM DOMAIN

Effectiveness  
Timeliness

## IDENTIFYING INFORMATION AND AVAILABILITY

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### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2000 Feb (reviewed 2005)

### GUIDELINE DEVELOPER(S)

American College of Obstetricians and Gynecologists - Medical Specialty Society

### SOURCE(S) OF FUNDING

American College of Obstetricians and Gynecologists (ACOG)

### GUIDELINE COMMITTEE

American College of Obstetricians and Gynecologists (ACOG) Committee on Practice Bulletins-Obstetrics

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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## GUIDELINE AVAILABILITY

Electronic copies: Not available at this time.

Print copies: Available for purchase from the American College of Obstetricians and Gynecologists (ACOG) Distribution Center, PO Box 4500, Kearneysville, WV 25430-4500; telephone, 800-762-2264, ext. 192; e-mail: [sales@acog.org](mailto:sales@acog.org). The ACOG Bookstore is available online at the [ACOG Web site](#).

## AVAILABILITY OF COMPANION DOCUMENTS

None available

## PATIENT RESOURCES

None available

## NGC STATUS

This NGC summary was completed by ECRI on September 14, 2004. The information was verified by the guideline developer on December 8, 2004.

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